Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A multidirectional inertial device having a plurality of preferential detection axes, comprising:

inertial sensor means, which are sensitive to accelerations parallel to said preferential detection axes;

transduction means, coupled to said inertial sensor means and supplying a plurality of acceleration signals, each of which is correlated to an acceleration parallel to a respective one of said preferential detection axes;

first comparison means, connected to said transduction means and supplying a ~~selected logic value~~first recognition signal when only a first of said acceleration signals is greater than a respective upper threshold and supplying the first recognition signal~~selected logic value~~ when only a second of said acceleration signals is greater than a respective upper threshold; and

second comparison means, connected to said transduction means and to said first comparison means for supplying said first recognition signal ~~selected logic value~~ when any two of said acceleration signals are each greater than a respective lower threshold, which is smaller than the respective upper threshold.

2. (Original) The device according to claim 1 wherein said first comparison means comprise, for each said preferential detection axis, a respective first comparator, which receives the respective one of said upper thresholds and receives the respective one of said acceleration signals, and at least one first logic gate, connected to each first comparator.

3. (Previously Presented) The device according to claim 2 wherein said second comparison means comprise, for each of said preferential detection axes, a respective

second comparator, which receives the respective one of said lower thresholds and receives the respective one of said acceleration signals, and at least one second logic gate, connected to each second comparator.

4. (Original) The device according to claim 1 wherein said upper thresholds are equal to one another, and said lower thresholds are equal to one another.

5. (Original) The device according to claim 1 wherein the ratio between the upper threshold and the lower threshold corresponding to a same one of said preferential reference axes is substantially equal to $1/\sqrt{2}$.

6. (Original) The device according to claim 1 wherein said inertial sensor means comprise at least one micro-electro-mechanical sensor with capacitive unbalancing.

7. (Original) The device according to claim 6 wherein said inertial sensor means comprise a micro-electro-mechanical capacitive-unbalance sensor for each of said preferential detection axes.

8. (Previously Presented) The device according to claim 6 wherein said transduction means comprise:

at least one current-to-voltage converter, connectable to said at least one micro-electro-mechanical sensor;

a subtractor node, having an inverting input and a non-inverting input, the non-inverting input connected to an output of said current-to-voltage converter;

a filter, connected between said output of said current-to-voltage converter and said inverting input of said subtractor node; and

a rectifier, which is connected to an output of said subtractor node and supplies at least one of said respective acceleration signals.

9. (Currently Amended) A portable electronic apparatus, comprising:

a device for reactivation from stand-by, said device including a multidirectional inertial device that includes:

an output terminal of the device for reactivation for standby;

inertial sensor means, which are sensitive to accelerations parallel to each of a plurality of preferential detection axes;

transduction means, coupled to said inertial sensor means and supplying a plurality of acceleration signals, each of which is correlated to an acceleration parallel to a respective one of said preferential detection axes;

first comparison means, connected to said transduction means and supplying a ~~selected logic value~~reactivation signal at the output terminal when only a first one of said acceleration signals is greater than a respective upper threshold, and supplying the ~~selected logic value~~ reactivation signal at the output terminal when only a second one of said acceleration signals is greater than a respective upper threshold; and

second comparison means, connected to said transduction means and to said first comparison means for supplying said ~~selected logic value~~ reactivation signal at the output terminal when any two of said acceleration signals are each greater than a respective lower threshold, which is smaller than the respective upper threshold.

10. (Currently Amended) A method for detecting the state of motion of a device, comprising:

generating a plurality of acceleration signals, each of which is correlated to an acceleration parallel to a respective preferential detection axis;

supplying a first recognition signal ~~selected logic value~~ at an output terminal when only a first one of said acceleration signals is greater than a respective upper threshold;

supplying the first recognition signal ~~selected logic value~~ at the output terminal when only a second one of said acceleration signals is greater than a respective upper threshold; and

supplying the first recognition signal ~~selected logic value~~ at the output terminal when any two of said acceleration signals are each greater than a respective lower threshold, which is smaller than the respective upper threshold.

11. (Original) The method according to claim 10 wherein said higher thresholds are equal to one another, and said lower thresholds are equal to one another.

12. (Original) The method according to claim 10 wherein the ratio between the upper threshold and the lower threshold corresponding to a same one of said preferential reference axes is substantially equal to $1/\sqrt{2}$.

13. (Currently Amended) A device, comprising:

an acceleration circuit configured to produce a dynamic acceleration signal corresponding to a level of acceleration in each of a plurality of detection axes;

a comparator circuit for each of the detection axes, configured to compare the respective dynamic acceleration signal with respective higher and lower threshold signals; and

a logic circuit configured to produce a first recognition signal ~~selected logic value~~ at an output terminal if the dynamic acceleration signal of only a first one of the plurality of detection axes exceeds its respective higher threshold, if the dynamic acceleration signal of only a second one of the plurality of detection axes exceeds its respective higher threshold, and if the dynamic acceleration signals of any two of the plurality of detection axes exceed their respective lower thresholds.

14. (Original) The device of claim 13 wherein the acceleration circuit comprises:

a sensor configured to sense acceleration in each of the detection axes; and

a transduction circuit for each of the detection axes, each transduction circuit configured to receive from the sensor an acceleration value corresponding to a level of

acceleration in the respective one of the detection axes and to produce the respective dynamic acceleration signal.

15. (Original) The device of claim 14 wherein each of the transduction circuits is configured to subtract, from the respective acceleration value, a respective static acceleration value, thereby producing the respective dynamic acceleration signal.

16. (Original) The device of claim 14 wherein the sensor comprises a micro-electro-mechanical capacitive-unbalance sensor for each of the plurality of detection axes.

17. (Original) The device of claim 13 wherein the acceleration circuit comprises:

a sensor configured to sense acceleration in each of the detection axes; and

a transduction circuit configured to receive from the sensor an acceleration value corresponding to a level of acceleration in each of the plurality of detection axes, sequentially, and to produce, for each detection axis, its respective dynamic acceleration signal.

18. (Original) The device of claim 13 wherein the number of detection axes is two.

19. (Original) The device of claim 13, further comprising a cell phone.

20. (Original) The device of claim 13, further comprising a portable computer.

21. (Currently Amended) A method, comprising:

sensing acceleration of a device in each of a plurality of axes;

comparing respective levels of the acceleration in the axes with a high threshold;

comparing the respective levels of the acceleration in the axes with a low threshold;

producing a first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to only a first one of the plurality of axes exceeds the high threshold;

producing the first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to only a second one of the plurality of axes exceeds the high threshold; and

producing the first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to any two of the plurality of axes exceeds the low threshold.

22. (Original) The method of claim 21 wherein each of the plurality of axes lies at right angles to each other.

23. (Previously Presented) The apparatus of claim 9 wherein each of the plurality of preferential detection axes are mutually orthogonal.

24. (Previously Presented) The apparatus of claim 9 wherein the plurality of preferential detection axes comprises first and second axes lying perpendicular to each other.

25. (Currently Amended) The device according to claim 1 wherein the first comparison means supply the first recognition signal ~~selected logic value~~ when ~~the~~ an absolute value of a first one of said acceleration signals is greater than the respective upper threshold, and when an absolute value of a second one of said acceleration signals is greater than the respective upper threshold, and the second comparison means supply the first recognition signal ~~selected logic value~~ when the absolute value of any two of said acceleration signals are each greater than the respective lower thresholds.

26. (Previously Presented) The device according to claim 9 wherein each of the plurality of acceleration signals is correlated to an absolute value of the acceleration parallel to the respective one of said preferential detection axes.

27. (Previously Presented) The method according to claim 10 wherein the step of generating a plurality of acceleration signals comprises generating the plurality of acceleration signals, each of which is correlated to an absolute value of the acceleration parallel to the respective preferential detection axis.

28. (Previously Presented) The device of claim 13 wherein the comparator circuit for each of the detection axes is configured to compare an absolute value of the respective dynamic acceleration signal with the respective higher and lower threshold signal.

29. (Currently Amended) The method of claim 21 wherein:

the step of producing the first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to any of the plurality of axes exceeds the high threshold comprises producing the first recognition signal ~~selected logic value~~ if an absolute value of the level of the acceleration with respect to any one of the plurality of axes exceeds the high threshold; and

the step of producing the first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to any two of the plurality of axes exceeds the low threshold comprises producing the first recognition signal ~~selected logic value~~ if an absolute value of the level of the acceleration with respect to any two of the plurality of axes exceeds the low threshold.

30. (Currently Amended) The method of claim 21 wherein:

the step of producing a first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to only a first one of the plurality of axes exceeds the high threshold comprises producing the first recognition signal ~~selected logic value~~ at an output terminal;

the step of producing the first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to only a second one of the plurality of axes exceeds the high threshold comprises producing the first recognition signal ~~selected logic value~~ at the output terminal; and

the step of producing the first recognition signal ~~selected logic value~~ if the level of the acceleration with respect to any two of the plurality of axes exceeds the low threshold comprises producing the first recognition signal ~~selected logic value~~ at the output terminal.

31. (New) The device of claim 1, comprising an output terminal of the multidirectional inertial device, and wherein the first and second comparison means are each configured to supply the first recognition signal at the output terminal.

32. (New) The device of claim 13, comprising:

a portable electronic apparatus that includes the acceleration circuit, the comparator circuit, and the logic circuit, the portable electronic apparatus configured to go into stand-by after a period of inactivity, and further configured to return to an active state when the first recognition signal is produced at the output of the logic circuit.

33. (New) The method of claim 21, comprising:

deactivating the device to a stand-by status in response to a period of inactivity of the device; and

reactivating the device when the recognition signal is produced.